

Safe Work Procedure – Biological Safety Cabinet (BSC) Power Failure

Purpose

This document describes the safe work procedure for dealing with a biological safety cabinet power failure.

Scope

This document applies to all UBC employees (faculty, staff, students, visiting researchers, and volunteers)

Regulations

- [WorkSafeBC Occupational Health and Safety Regulation](#)
 - Section 30.12: Biological safety cabinets
- [Transportation of Dangerous Goods Regulations](#)
- [Human Pathogens and Toxins Act](#)

Definitions

Administrative Controls: The modification of work processes or activities to minimize risk

Engineering Controls: The modification of the physical work environment to minimize risk

Hazard: A potential source of harm to a person that can lead to a risk of injury or occupational disease

Risk: The chance of injury or occupational disease

Risk Assessment: The process where hazards are identified, their risk evaluated, and controls for the risk are determined to eliminate the hazard or minimize the risk

Supervisor: The person directly responsible for overseeing the tasks of the worker

Worker: All employees of UBC including faculty, staff, and paid students



Responsibilities

Supervisor

- Identify all workers who carry out this task under your supervision
- Conduct a risk assessment to identify the potential hazards associated with the task and their associated risks
- Implement controls using the hierarchy of controls to minimize the risk due to the hazard
- Ensure safe work procedures are documented
- Ensure proper training has been provided to workers PRIOR to commencing work (e.g. safe work procedures, use of equipment or tools, personal protective equipment requirements, identifying and reporting hazards, etc.) and that the training has been documented
- Ensure workers have access to and understand any required documentation such as manuals, Safety Data Sheets (SDS) etc.
- Educate workers on emergency procedures, contacts and numbers. If emergency contact information is not posted at the workplace, provide the worker with a copy to carry with them. The worker must know what to do in case of emergency/injury
- Ongoing consultation with Joint Occupational Health and Safety Committee in the review and revision of this procedure to ensure the content is adequate and relevant to current research
- Communicate risks that may arise outside of those that are predetermined

Workers

- Understand and follow this safe work procedure
- Complete the required training for the task
- Use proper personal protective equipment
- Report any unsafe conditions to their supervisor
- Report all incidents in [CAIRS](#)

Risk Assessment

[Attach](#) the completed risk assessment to this document.

Training Requirements

- Biosafety Training
- Chemical Safety Training

Materials/Equipment

- Appropriate decontamination medium

Safe Work Procedure

Before Commencing Work:

1. Wear appropriate PPE (lab gown, safety glasses, latex gloves)
2. Ensure decontaminating medium is available
3. Ensure biohazardous waste containers are available

Commencing Work/Work Procedure:

1. Avoid personal contamination; close any opened containers of biohazardous material; surface-decontaminate, and remove them from the BSC.
2. Surface-decontaminate and remove all other equipment/materials from the BSC.
3. Remove and dispose of biohazardous waste according to UBC guidelines.
4. Remove any contaminated PPE and place in appropriate waste receptacle. Place gowns in laundry basket.
5. If PPE was removed in previous step, replace removed PPE with uncontaminated PPE.
6. Switch off the alarm and blower motor.
7. Affix a warning sign (e.g. "OUT OF ORDER. DO NOT USE") to the cabinet.
8. If the failure is due to a temporary power outage: restart and decontaminate the BSC when the power returns.
9. If the failure is due to BSC malfunction: close sash until power returns and have the cabinet serviced. Ensure that the BSC is decontaminated before any internal repairs are carried out.

Post Procedure:

1. Notify the lab manager if anyone may have been exposed to infectious material due to the cabinet failure and submit a report to CAIRS.

Emergency Rescue and Evacuation Procedures

Emergency Contact Information

- Police 911

Mode of Emergency Communication

- Cell phone, landline

First Aid

- UBC Vancouver Campus First Aid (604.822.4444)

Emergency Procedures

- On campus
 - Seek first aid
 - Contact supervisor
 - Report incident in CAIRS
- Off Campus
 - Seek first aid



- Contact supervisor
- Report incident in CAIRS



Review and Retention

This SWP is reviewed annually or whenever deemed necessary by the responsible departmental representative.

Document Approval Signatures

Name of Supervisor	Signature of Supervisor	Date
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Name of Department Head	Signature of Department Head	Date
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